REMARKS

This is in response to the Office Action mailed on August 25, 2004, and the references cited therewith.

Claims 1 and 30 are amended, no claims are canceled, and no claims are added; as a result, claims 1-30 are now pending in this application.

§*103 Rejection of the Claims*

Claims 1, 2, 4-16 and 18-30 were rejected under 35 USC § 103(a) as allegedly being unpatentable over Cossins (U.S. 6,343,290) in view of Kapoor (U.S. 5,884,038).

Claims 3 and 17 were rejected under 35 USC § 103(a) as allegedly being unpatentable over Cossins and Kapoor as applied to claim 1 above, and further in view of Zoken (U.S. 5,944,787).

Applicants do not admit that any one of the above references is prior art, and reserve the right to swear behind these references at a later date. Nevertheless, Applicants respectfully submit that the claims are distinguishable over the above references for the reasons argued below.

The M.P.E.P. states that:

> In order for the Examiner to establish a *prima facie* case of obviousness, three base criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. **Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.** The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be

found in the prior art, and not based on applicant's disclosure. *M.P.E.P.* § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir. 1991)).

An invention can be obvious even though the suggestion to combine prior art teachings is not found in a specific reference. *In re Oetiker*, 24 USPQ2d 1443 (Fed. Cir. 1992). At the same time, however, although it is not necessary that the cited references or prior art specifically suggest making the combination, there must be some teaching somewhere which provides the suggestion or motivation to combine prior art teachings and applies that combination to solve the same or similar problem which the claimed invention addresses. One of ordinary skill in the art will be presumed to know of any such teaching. (See, e.g., *In re Nilssen*, 851 F.2d 1401, 1403, 7 USPQ2d 1500, 1502 (Fed. Cir. 1988) and *In re Wood*, 599 F.2d 1032, 1037, 202 USPQ 171, 174 (CCPA 1979)).

Applicants respectfully submit that the Office Action did not make out a *prima facie* case of obviousness for at least the following reasons:

(1) Even if combined, the cited references fail to teach or suggest all of the elements of Applicants' claimed invention;

(2) The cited references teach away from Applicants' claimed invention; and

(3) The cited references are nonanalogous art.

1. CLAIMED FEATURES LACKING IN COMBINATION

The reference (or references when combined) must teach or suggest all the claim elements. M.P.E.P. § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir. 1991)).

Claim 1 of the present application recites:

> *"performing at least one automated process to generate geolocation information for the network address;*

> *determining whether the at least one automated process* *generated satisfactory geolocation information* *for the network address; and*
>
> *if the automated process* *did not generate satisfactory geolocation information* *for the network address, then forwarding of the network address for manual resolution."*
>
> *(Applicants' claim 1, Emphasis Added)*

1.1 COSSINS DOES NOT TEACH OR SUGGEST DETERMINING WHETHER AN AUTOMATED PROCESS GENERATED SATISFACTORY GEOLOCATION INFORMATION FOR THE NETWORK ADDRESS

In rejecting claim 1, the Office Action alleges that Cossins (column 19, line 46-column 20, line 36) discloses "determining whether the at least one automated process generated satisfactory geolocation information for the network information." Specifically, the Office Action appears to equate "generating a map to display the network evidence and the geographic limits within a search arrange for the search criteria" to a determination regarding whether an automated process has generated satisfactory geolocation information. The cited portions of Cossins, which are reproduced below, describe display of a map that identifies "trouble areas" (or trouble tickets) which may be color-coded to enable convenient visual identification of such areas.

However, the display of such a map, indicating "trouble tickets" or "trouble areas," does not involve making a determination regarding whether or not an automated process has generated satisfactory geolocation information. First, the display of the information regarding "trouble tickets" does not involve any determination whether the geolocation information is satisfactory or unsatisfactory. While the display of "trouble ticket" information may identify unsatisfactory network performance conditions, this is clearly very different from a determination as to whether an automated process generated satisfactory geolocation information.

In conclusion, Cossins simply fails to provide any teaching or suggestion of making a determination as to whether geolocation information for a network address, as generated by an automated process, is satisfactory or not.

The Office Action identifies the following text in Cossins, which has been reproduced for the Examiner's convenience, as being relevant:

> "The NDO 808 displays network data and geospatial data. The NDO 808 may comprise tabs for output criteria. For example, the NDO 808 may comprise tabs to display network data for a cell, a trouble ticket, a switch, a base transceiver, an identification of cells in a search range, or an identification of trouble tickets in a search range.
>
> The legend 810 identifies components and colors or other identifying designations displayed in the GNDIO 804 and provides a description of the components and of the identifying designations. For example, the legend can identify cell sites and status, trouble areas, coverage, and definable trouble areas.
>
> ...
>
> FIG. 9 depicts an example of a screen in which a search criteria may be entered. The screen 902 has a GNDIO panel 904, an STDE panel 906, an NDO panel 908, and navigation tools 910. The STDE panel 906 and the NDO panel 908 have navigation tabs 912 and 914 for selecting options for search and entry of data and for data output, respectively.
>
> The user can select navigation tabs in the STDE panel 906 to enter a search criteria including an address, a trouble ticket, a major trading area (MTA), a base transceiver

component of an address, including a street address, an intersection, a city, a state, or a zip code or any combination thereof. Once a user has entered the search criteria, the user may select the "Display Map" button to initiate the search.

FIG. 10 depicts an example of a screen displayed to a user after a search has been initiated. In this example, the user entered a street address, a city, and a state. The GNMS receives the search criteria, determines the network data and geospatial data corresponding to the search criteria, and transmits the network data and the geospatial data to the user. A map is generated to the user in the GNDIO panel 904. The map displays the network elements and the geographic elements within a search range of the search criteria. The search range can be predetermined or set on a user-by-user basis.

In the example of FIG. 10, the map centers at the geocode of the address entered as the search criteria. The map identifies cells, such as the cell 1002, trouble tickets, such as the trouble ticket 1004, known trouble areas, such as the known trouble area 1006 (i.e. a user or engineer defined trouble area), a customer defined trouble area (CDTA) 1008, streets, such as the street 1010, and streams, such as the stream 1012.

… In addition, other network data can be displayed and color-coded. For example, the trouble tickets can be color-coded so the status or a problem associated with a trouble ticket is quickly known.

... For example, if the trouble ticket layer is not enabled, the identification and color-coding of trouble tickets will not be displayed in the legend. Moreover, the trouble tickets will not be displayed on the map or in the NDO."

(Cossins, col. 19, ln. 46 – col. 20, ln. 36; Emphasis Added)

1.2 COSSINS DOES NOT TEACH OR SUGGEST THAT, IF AN AUTOMATED PROCESS DID NOT GENERATE SATISFACTORY GEOLOCATION INFORMATION FOR THE NETWORK ADDRESS, THEN FORWARDING OF THE NETWORK ADDRESS FOR MANUAL RESOLUTION.

In rejecting claim 1, the Office Action further contends that Cossins (column 20, line 37-column 21, line 47) discloses "if the automated process did not generate satisfactory geolocation information for the network information, then forwarding of the network information for manual resolution." Specifically, the Office Action appears to equate "identifying a trouble ticket including the status of network elements and geographic elements; if found, enabled users to enter the information of the trouble ticket to the computer system for a resolution" to forwarding of the network information for manual resolution. Applicants strongly disagree with this contention for the reasons set out below.

The cited portions of Cossins, which are reproduced below, again describe display of a map that identifies "trouble areas" (or trouble tickets) which may be color-coded to enable convenient visual identification of such areas. Discussion is also provided regarding a "ticket tab" that displays network data associated with a trouble ticket (e.g., a problem type, such as dropped, busy, blocked, closed or unspecified). A user has the option of selecting a checkbox to close a trouble ticket, if not already closed.

Firstly, as pointed out above, the display of information regarding "trouble areas" pertaining to a network is very different from making a determination as to whether geolocation information, itself, is satisfactory or not. While the display of "trouble tickets" may amount to the display of information identifying unsatisfactory network conditions, this is a very different from making a determination as to whether geolocation information itself is satisfactory or not.

Secondly, Applicants can find no discussion in the cited portions of Cossins relating to forwarding "trouble ticket" information to enable problems identified by the "trouble ticket" information to be addressed, manually or otherwise. Even if Cossins did provide such a disclosure in the cited portions, this is very different from forwarding geolocation information, which is in and of itself unsatisfactory, for manual resolution.

In summary, Applicants strongly disagree that there is any teaching or suggestion in Cossins of forwarding network information for manual resolution, in the event that an automated process did not generate satisfactory geolocation information for the network information.

The Office Action identifies the following text in Cossins, which has been reproduced for the Examiner's convenience, as being relevant:

> "In the example of FIG. 10, the map centers at the geocode of the address entered as the search criteria. The map identifies cells, such as the cell 1002, trouble tickets, such as the trouble ticket 1004, known trouble areas, such as the known trouble area 1006 (i.e. a user or engineer defined trouble area), a customer defined trouble area (CDTA) 1008, streets, such as the street 1010, and streams, such as the stream 1012.
>
> A zoom 1014 and a legend 1016 also are displayed to the user. The zoom 1014 allows a user to zoom into, or zoom out of, the map area displayed to the user. The legend 1016 has legend components that identify network elements and geographic elements. In the example of FIG. 10, the network elements can be color-coded so that a user may know a status of the network elements quickly by viewing their color. In addition, any of the areas of the map displayed to the user can be color-coded so that a user may quickly identify the status of the network coverage of the area. In addition, other network data can be displayed and color-coded. For example, the trouble tickets can be color-coded so the status or a problem associated with a trouble ticket is quickly known.
>
> The legend displayed to the user can vary based upon a user profile and layers selected for each user (See FIG. 28.) Layers may include CDTA, engineering defined trouble areas (also referred to as user defined trouble areas or known trouble areas), engineering

designed coverage, future cell sites, lakes and rivers, MTAs, marketing defined coverage, network events, parks and recreational areas, trouble tickets, and other layers. For example, if the trouble ticket layer is not enabled, the identification and color-coding of trouble tickets will not be displayed in the legend. Moreover, the trouble tickets will not be displayed on the map or in the NDO.

In the example of FIG. 10, the legend 1016 comprises legend components for network cell status for on air, outage within seventy-two hours, current outage, and future site, coverage for excellent, very good, good, average, and poor, known trouble areas, customer defined trouble areas, and trouble tickets for blocked, dropped, fast busy, unspecified, and closed. Any number or units of time or units for coverage may be used, such as twenty four hours or degrees of coverage. Different, greater, or fewer legend components may be displayed.

When the map is generated to the user, network data for the network elements is populated. For example, network data for cells and for trouble tickets is populated when a map is generated. The system can be configured to default on selected navigation tabs based on a user selection.

In the example of FIG. 10, a list of cells with a color-coded cell status in a search range of 5.0 km or 0.045 degrees is displayed to the user in the cells tab of the NDO panel. In addition, the latitude and longitude of the address entered as the search criteria, the cells, the cell identifiers, and the color-coded status of each cell are displayed. It will be appreciated that other search ranges may be used.

FIG. 11 depicts an example of the tickets tab of the NDO. The tickets tab displays the range of 5.0 km (0.045 degrees) radius. In addition, the latitude and longitude correspondent to the search criteria is displayed. The ticket tab displays the network data associated with the trouble tickets within the range. The trouble tickets are listed along with the ticket identifier, a color-coded ticket status, and the problem type, such as dropped, fast busy, blocked, closed, or unspecified. A user may select a check box to close the ticket if the ticket is not already closed.

FIG. 12 depicts an example of site information displayed to a user. A user can view the site information for any cell site by clicking on the cell site displayed in the map. This causes the GNMS to transmit the network data to the user for viewing. For example, the site information may comprise a region, a market, a site identification (ID), a site description (Desc), a latitude of the cell site, a longitude of the cell site, an on air date of the cell site, a cell site status, and/or an antenna height. The site information is populated with the network data when the user selects the cell site from the map."

(Cossins, col. 20, ln. 37 – col. 21, ln. 47; Emphasis Added)

1.2 KAPOOR DOES NOT TEACH A QUERY, INCLUDING A NETWORK ADDRESS.

The Office Action, in rejecting claim 1, states that while Cossins does not specifically disclose a query including an Internet address, "Kapoor in the same network management system discloses a query including an Internet address [Client (101 fig. 1) issuing a Domain Name Server (105 fig. 1) resolution request for a IP address to a Domain Name Server, see fig. 1, col.1 lines 26-50 and col. 4 lines 9-54]." (Office Action, page 4, second paragraph).

Applicants point out that claim 1 does not recite a query, and assume that the Examiner intended to reference claim 13 in the above identified text from the Office Action. In any event, Applicants respectively disagree with the above rejection. Kapoor, with respect to FIG. 1, discloses that a client makes a DNS resolution request to a DNS server. A DNS resolution request in fact does not include an IP address, but instead includes a host name (e.g., www.2.Internet_Host_ABC.com), and is a request for an IP address for the relevant host name. Accordingly, the DNS resolution request referenced in the Office Action is in fact a request for an Internet address, as opposed to being a query including a network address, as required by claim 1.

Applicants have again reproduced the relevant portion of Kapoor below, emphasizing text in support of the Applicants' arguments presented immediately above.

Kapoor describes the following:

> " FIG. 1 is a block diagram that illustrates a client 101 trying to connect to a web server 103 of an Internet Host ABC. As shown in FIG. 1, client 101 makes a DNS resolution request 107 to DNS server 105 to request the IP address of web server 103. DNS server 105 returns the IP address response 109 in reply to the DNS resolution request 107."
>
> *(Kapoor, Col 1, lines 26-32, Emphasis Added).*

2. THE CITED REFERENCES TEACH AWAY FROM APPLICANTS' CLAIMED INVENTION.

A factor cutting against a finding of motivation to combine or modify the prior art is when the prior art teaches away from the claimed combination. A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path the applicant took. *In re Gurley*, 27 F.3d 551, 31 USPQ 2d 1130, 1131 (Fed. Cir. 1994); *United States v. Adams*, 383 U.S. 39, 52, 148 USPQ 479, 484 (1966); *In re Sponnoble*, 405 F.2d 578, 587, 160 USPQ 237, 244 (C.C.P.A. 1969); *In re Caldwell*, 319 F.2d 254, 256, 138 USPQ 243, 245 (C.C.P.A. 1963).

Applicants contend that Kapoor in fact teaches away from the claimed combination of claim 13 for at least the following reason. As noted above, Kapoor is concerned with DNS resolution requests, which are in fact requests to retrieve an IP address. This is in direct contrast to the invention of claim 13, which is concerned with a query that includes a network address.

3. OTHER CLAIMS

While the above arguments have been presented primarily with respect to claim 1 of the present application, the other independent claims of the present application each include similar limitations. Accordingly, the Examiner is respectfully requested to consider the above remarks with respect to these further independent claims.

The dependent claims of the present application include, either directly or indirectly, the limitations of the independent claims argued above to be patentable over the three cited references. These dependent claims are accordingly also considered patentable in view of the additional elements (or limitations) which they provide to a patentable combination. If any independent claim is non-obvious under 35 U.S.C. Section §103, then any claim depending there from is also non-obvious. M.P.E.P. Section §2143.03.

Conclusion

Applicant respectfully submit that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicants' attorney at 408-333-9972 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 25th day of January, 2005.

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